

Amendments to the Specification

Please insert the following new paragraphs at page 30, line 25:

In one embodiment of polymer blends for the first group of active agents, a miscible polymer blend of the present invention includes a hydrophobic cellulose derivative. A hydrophobic cellulose derivative is preferably present in the miscible polymer blend in an amount of at least about 0.1 wt-%, and more preferably up to about 99.9 wt-%, based on the total weight of the blend, depending on the active agent and specific choice of polymers.

Preferred examples of a hydrophobic cellulose derivative include esters (organic or inorganic) and ethers. Preferred examples of inorganic esters include nitrates. More preferred examples of the hydrophobic cellulose derivative include those selected from the group consisting of methyl cellulose, ethyl cellulose, hydroxy propyl cellulose, cellulose acetate, cellulose propionate, cellulose butyrate, cellulose nitrate, and combinations thereof. In this context, "combinations" refers to mixtures and copolymers thereof. The mixtures and copolymers can include one or more members of the group and/or other monomers/polymers. Examples of copolymers include hydroxypropyl methyl cellulose, hydroxypropyl ethyl cellulose, methyl ethyl cellulose, cellulose acetate propionate, cellulose acetate butyrate, cellulose propionate butyrate, cellulose acetate propionate butyrate, and the like. Particularly preferred hydrophobic cellulose derivatives include cellulose acetate butyrate and cellulose acetate propionate.

A preferred hydrophobic cellulose derivative includes organic esters or ethers wherein the number of hydroxyl groups is from 0 to 3 per repeat unit. More preferably, the number of hydroxyl groups is from 0 to 0.5 per repeat unit, and most preferably, zero (0).

Preferably, higher molecular weights of polymers are desirable for better mechanical properties; however, the molecular weights should not be so high such that the polymer is not soluble in a processing solvent for preferred solvent-coating techniques or not miscible with the other polymer(s) in the blend. A preferred hydrophobic cellulose derivative has a number

average molecular weight of at least about 10,000 g/mol, and more preferably at least about 20,000 g/mol. A preferred hydrophobic cellulose derivative has a number average molecular weight of no greater than about 200,000 g/mol, and more preferably no greater than about 100,000 g/mol, and most preferably no greater than about 70,000 g/mol.

A miscible polymer blend of the present invention suitable for use with the first group of active agents and that includes a hydrophobic cellulose derivative also includes a polyvinyl homopolymer or copolymer. Herein, a "copolymer" includes two or more different repeat units, thereby encompassing terpolymers, tetrapolymers, and the like. A polyvinyl homopolymer or copolymer is preferably present in the miscible polymer blend in an amount of at least about 0.1 wt-%, and more preferably up to about 99.9 wt-%, based on the total weight of the blend, depending on the active agent and specific choice of polymers.

The polyvinyl homopolymer or copolymer is preferably selected from the group consisting of a polyvinyl alkylate, a polyvinyl alkyl ether, a polyvinyl acetal, and combinations thereof. In this context, "combinations" refers to mixtures and copolymers thereof. The copolymers can include one or more members of the group and/or other monomers/polymers. Thus, polyvinyl copolymers include copolymers of vinyl alkylates, vinyl alkyl ethers, and vinyl acetals with each other and/or with a variety of other monomers including styrene, hydrogenated styrene, (meth)acrylates (i.e., esters of acrylic acid or methacrylic acid also referred to as acrylates and methacrylates, including alkyl and/or aryl (meth)acrylates), cyanoacrylates (i.e., esters of cyanoacrylic acid including alkyl and/or aryl cyanoacrylates), and acrylonitrile.

Preferred polyvinyl homopolymers or copolymers thereof include polyvinyl formal, polyvinyl butyral, polyvinyl ether, polyvinyl acetate, polyvinyl propionate, polyvinyl butyrate, and combinations thereof (i.e., mixtures and copolymers thereof). A particularly preferred polyvinyl homopolymer or copolymer is a homopolymer or copolymer of polyvinyl alkylates including, for example, polyvinyl acetate, polyvinyl propionate, or polyvinyl butyrate. Of these, polyvinyl acetate is particularly desirable.

Preferably, higher molecular weights of polymers are desirable for better mechanical properties; however, the molecular weights should not be so high such that the polymer is not soluble in a processing solvent for preferred solvent-coating techniques or not miscible with the other polymer(s) in the blend. A preferred hydrophobic polyvinyl homopolymer or copolymer has a number average molecular weight of at least about 10,000 g/mol, and more preferably at least about 50,000 g/mol. A preferred hydrophobic polyvinyl homopolymer or copolymer has a weight average molecular weight of no greater than about 1,000,000 g/mol, and more preferably no greater than about 200,000 g/mol.

Preferably, the polyvinyl homopolymer or copolymer has a lower glass transition temperature (T_g) than the hydrophobic cellulose derivative. For example, a preferred combination includes cellulose acetate butyrate, which has a T_g of 100-120°C, and polyvinyl acetate, which has a T_g of 20-30°C. By combining such high and low T_g polymers, the active agent delivery system can be tuned for the desired dissolution time of the active agent.

In another embodiment of polymer blends for the first group of active agents, a miscible polymer blend of the present invention includes a polyurethane, which can be a homopolymer or copolymer. Herein, a "copolymer" includes two or more different repeat units, thereby encompassing terpolymers, tetrapolymers, and the like. The polyurethane is typically hydrophobic. As used herein in this context (in the context of the polymer matrix), the term "hydrophobic" refers to a material that will not increase in volume by more than 10% or in weight by more than 10%, whichever comes first, when swollen by water at body temperature (i.e., about 37°C).

A polyurethane is preferably present in the miscible polymer blend suitable for use with the first group of active agents in an amount of at least about 0.1 wt-%, and more preferably up to about 99.9 wt-%, based on the total weight of the blend, depending on the active agent and specific choice of polymers. A particularly preferred polyurethane has a Shore durometer hardness of at least about 50A, more preferably at least about 55D, and most preferably at least

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about 70D. A particularly preferred polyurethane has a Shore durometer hardness of no greater than about 90D, more preferably no greater than about 85D, and most preferably no greater than about 80D. The hardness numbers are derived from the Shore scale, with the A scale being used for softer and the D scale being used for harder materials.

Suitable polyurethanes are available from a variety of sources such as Thermedics, Inc. (Woburn, MA), including polymers marketed under the tradenames TECOPLAST, TECOTHANE, CARBOTHANE, and TECOFLEX. Other preferred polymers include the PELLETHANE and ISOPLAST series available from Dow Chemical Co. (Midland, MI), especially PELLETHANE 75D; ELASTHANE, PURSIL, CARBOSIL, BIONATE, and BIOSPAN, available from the Polymer Technology Group, Inc. (Berkeley, CA); ESTANE, available from Noveon, Inc. (Cleveland, OH); ELAST-EON, available from AorTech Biomaterials (Sidney, Australia); and TEXIN, available from Bayer (Pittsburg, PA).

Examples of such polyurethanes include poly(carbonate urethane), poly(ether urethane), poly(ester urethane), poly(siloxane urethane), poly(hydrocarbon urethane), such as those exemplified in U.S. Pat. No. 4,873,308, sulfur-containing polyurethanes, such as those exemplified in U.S. Pat. Nos. 6,149,678, 6,111,052, 5,986,034, end-group modified polyurethanes, such as those commercially available from Polymer Technology Group, Inc., under the trade designation SME, or combinations thereof. Additionally, the polyurethanes may be derived from isocyanates including aromatic and/or aliphatic groups. A particularly preferred polyurethane is a poly(carbonate urethane) or a poly(ether urethane).

Preferably, higher molecular weights of polymers are desirable for better mechanical properties; however, the molecular weights should not be so high such that the polymer is not soluble in a processing solvent for preferred solvent-coating techniques or not miscible with the other polymer(s) in the blend. A preferred polyurethane has a number average molecular weight of at least about 20,000 g/mol, and more preferably at least about 80,000 g/mol. A preferred polyurethane has a number average molecular weight of no greater than about 1,000,000 g/mol, and more preferably no greater than about 300,000 g/mol.

A miscible polymer blend of the present invention suitable for use with the first group of active agents and that includes a polyurethane also includes at least a second miscible polymer that can have at least one Tg equal to or higher than any one Tg of the polyurethane.

Alternatively, the second polymer can have at least one Tg equal to or lower than any one Tg of the polyurethane. Preferably, the second polymer has at least one Tg higher than all Tg's of the polyurethane. This includes a wide variety of polymers such that the act of blending this second polymer with the polyurethane, the absolute value of the difference in at least one Tg ($T_{g_{polymer\ 1}} - T_{g_{polymer\ 2}}$) for each of at least two polymers within the blend is reduced by the act of blending. Alternatively, the second polymer has at least one Tg lower than at least one Tg of the polyurethane.

This second polymer (of the miscible polymer blend suitable for use with the first group of active agents and that includes a polyurethane) may also be a homopolymer or a copolymer. A second polymer is preferably present in the miscible polymer blend in an amount of at least about 0.1 wt-%, and more preferably up to about 99.9 wt-%, based on the total weight of the blend, depending on the active agent and specific choice of polymers.

For embodiments in which the second polymer has a Tg higher than all Tg's of the polyurethane, the second polymer is preferably selected from the group consisting of a polycarbonate, a polysulfone, a polyurethane, a polyphenylene oxide, a polyimide, a polyamide, a polyester, a polyether, a polyketone, a polyepoxide, a styrene-acrylonitrile copolymer, a polymethacrylate, a poly(methyl methacrylate), and combinations thereof. In this context, "combination" means mixtures and copolymers thereof. The mixtures and copolymers can include one or more members of the group and/or other monomers/polymers.

For embodiments in which the second polymer has a Tg lower than at least one Tg of the polyurethane, the second polymer is preferably selected from the group consisting of poly(ether urethane), poly(ester urethane), polyester, polyether, polyamides, aliphatic polycarbonate, poly(vinyl ester), poly(vinyl ether), polyacrylate, and poly(methyl acrylate), and combinations

thereof. Preferably, the second polymer is not a hydrophobic cellulose ester. Preferred embodiments of the present invention (e.g., those that include a hydrophobic active agent) include a polycarbonate as the second polymer. Suitable polycarbonates are commercially available from Bayer under the trade designation MAKROLON.

If the second polymer is a polyurethane, it is different than the polyurethane discussed above (i.e., the first polymer of the miscible polymer blend used with the first group of active agents). It can be selected from one of the polyurethanes discussed above. Preferably, the second polymer is a polyurethane having a Shore durometer hardness that is higher than that of the first polyurethane. More preferably, the second polymer is a polyurethane having a Shore durometer hardness of about 80D to about 90D. Alternatively, the second polymer can be a polyurethane having a Shore durometer hardness that is lower than that of the first polyurethane. For such embodiments, the second polymer is preferably a polyurethane having a Shore durometer hardness of about 20A to about 80A.

Preferably, higher molecular weights of polymers are desirable for better mechanical properties; however, the molecular weights should not be so high such that the polymer is not soluble in a processing solvent for preferred solvent-coating techniques or not miscible with the other polymer(s) in the blend. A preferred second polymer (of the miscible polymer blend suitable for use with the first group of active agents and that includes a polyurethane) has a number average molecular weight of at least about 10,000 g/mol, and more preferably at least about 50,000 g/mol. A preferred second polymer has a number average molecular weight of no greater than about 1,000,000 g/mol, and more preferably no greater than about 500,000 g/mol.

For certain embodiments, preferably, the second polymer has at least one T_g equal to or higher than all T_g's of the polyurethane (first polymer). Preferably, the polyurethane (first polymer) has a hard phase T_g of about 10°C to about 80°C (more preferably, about 20°C to about 60°C), and the preferred second polymer has at least one T_g (which is of a hard phase if it is a polyurethane) of about 50°C to about 200°C (more preferably, about 80°C to about 150°C).

Preferred embodiments of the present invention that include a hydrophobic active agent in a matrix system include a combination of a poly(carbonate urethane), which has a Tg of 20-40°C, and a higher durometer poly(carbonate urethane), which has a Tg of 70-90°C. Another preferred combination includes a poly(carbonate urethane), which has a Tg of 10-80°C, and polycarbonate, which has a Tg of 140°C. A third preferred combination includes a poly(ether urethane), which has a Tg of about 22°C, and a phenoxy resin, which has a Tg of 77°C. By combining such high and low Tg polymers, the active agent delivery system can be tuned for the desired dissolution time of the active agent.

In another embodiment of polymer blends for the first group of active agents, a miscible polymer blend of the present invention includes a poly(ethylene-co-(meth)acrylate). Herein, a (meth)acrylate refers to both an acrylate and a methacrylate. A preferred poly(ethylene-co-(meth)acrylate) is poly(ethylene-co-methyl acrylate) (PEcMA). Poly(ethylene-co-methyl acrylate) (PEcMA) is preferably present in the miscible polymer blend in an amount of at least about 0.1 wt-%, and more preferably up to about 99.9 wt-%, based on the total weight of the blend, depending on the active agent and specific choice of polymers.

Preferably, higher molecular weights of polymers are desirable for better mechanical properties; however, the molecular weights should not be so high such that the polymer is not soluble in a processing solvent for preferred solvent-coating techniques or not miscible with the other polymer(s) in the blend. A preferred poly(ethylene-co-(meth)acrylate) has a number average molecular weight of at least about 10,000 g/mol, and more preferably at least about 20,000 g/mol. A preferred poly(ethylene-co-(meth)acrylate) has a number average molecular weight of no greater than about 200,000 g/mol, and more preferably no greater than about 100,000 g/mol, and most preferably no greater than about 70,000 g/mol.

A miscible polymer blend of the present invention suitable for use with the first group of active agents and that includes a poly(ethylene-co(meth)acrylate) also includes a second polymer, not including poly(ethylene vinyl acetate), that is preferably present in the miscible

polymer blend in an amount of at least about 0.1 wt-%, and more preferably up to about 99.9 wt-%, based on the total weight of the blend, depending on the active agent and specific choice of polymers. The second polymer, not including poly(ethylene vinyl acetate), is preferably selected from the group consisting of a poly(vinyl alkylate), a poly(vinyl alkyl ether), a poly(vinyl acetal), a poly(alkyl and/or aryl methacrylate) or a poly(alkyl and/or aryl acrylate); and combinations thereof. In this context, "combinations" refers to mixtures and copolymers thereof. The mixtures and copolymers can include one or more members of the group and/or other monomers/polymers. Thus, polyvinyl copolymers include copolymers of vinyl alkylates, vinyl alkyl ethers, and vinyl acetals with each other and/or with a variety of other monomers including styrene, hydrogenated styrene, (meth)acrylates (i.e., esters of acrylic acid or methacrylic acid also referred to as acrylates and methacrylates, including alkyl and/or aryl (meth)acrylates), cyanoacrylates (i.e., esters of cyanoacrylic acid including alkyl and/or aryl cyanoacrylates), and acrylonitrile.

Preferred polyvinyl homopolymers or copolymers thereof include poly(vinyl formal), poly(vinyl butyral), poly(vinyl ether), poly(vinyl acetate), poly(vinyl propionate), poly(vinyl butyrate), and combinations thereof (i.e., mixtures and copolymers thereof). A particularly preferred polyvinyl homopolymer or copolymer is a homopolymer or copolymer of polyvinyl alkylates including, for example, poly(vinyl acetate), poly(vinyl propionate), or poly(vinyl butyrate). Of these, poly(vinyl acetate) is particularly desirable.

Preferred poly(alkyl methacrylate) polymers or poly(alkyl acrylate) (referred to generally as poly(alkyl (meth)acrylate) polymers or copolymers include poly(methyl methacrylate), poly(ethyl methacrylate), and poly(butyl methacrylate). Of these, poly(ethylene-co-ethyl acrylate) is particularly desirable.

Preferably, higher molecular weights of polymers are desirable for better mechanical properties; however, the molecular weights should not be so high such that the polymer is not soluble in a processing solvent for preferred solvent-coating techniques or not miscible with the other polymer(s) in the blend. A preferred hydrophobic second polymer has a number average

molecular weight of at least about 10,000 g/mol, and more preferably at least about 50,000 g/mol. A preferred hydrophobic second polymer has a weight average molecular weight of no greater than about 1,000,000 g/mol, and more preferably no greater than about 200,000 g/mol.

Preferably, the second polymer (in a miscible polymer blend suitable for use with the first group of active agents and that includes a poly(ethylene-co-(meth)acrylate)) has a higher glass transition temperature (T_g) than the poly(ethylene-co-methyl acrylate) (PEcMA). For example, a preferred combination includes polyvinyl butyral-co-vinyl alcohol-co-vinyl acetate, which has a T_g of 72-78°C, and poly(ethylene-co-methyl acrylate) (PEcMA), which has a T_g of 7°C. By combining such high and low T_g polymers, the active agent delivery system can be tuned for the desired dissolution time of the active agent.

Please insert the following new paragraphs at page 31, line 13:

In one embodiment of polymer blends for the second group of active agents, if the active agent is hydrophilic and of low molecular weight (no greater than 1200 g/mol), it is generally undesirable to include a hydrophilic polymer in the system. Although, it can be done, for example, if the system is a reservoir system. In this case, the hydrophilic polymer is in a base coat with a hydrophilic active agent incorporated therein, and with a miscible blend of hydrophobic polymers forming a cap coat, as prepared in Example 5 (although the goal of Example 5 was to prepare a reservoir system, this may not have been achieved due to the method of preparation). The hydrophobic polymers control the delivery of the low molecular weight hydrophilic active agent.

Suitable hydrophilic polymers can be naturally occurring or synthetic. They can include, polypeptides (e.g., proteins, oligopeptides) and polynucleotides (e.g., oligonucleotides, DNA, RNA, and analogs thereof). Examples of suitable hydrophilic polymers include, but are not limited to, polyurethanes, polyvinyl alcohols, poly(alkylene ether)s such as polypropylene oxide, polyethylene oxide, and polytetramethyl oxide, polyvinyl pyridines, polyvinyl pyrrolidones,

polyacrylonitriles (at least partially hydrolyzed), polyacrylamides, polyvinyl pyrrolidone/polyvinyl acetate copolymers, sulfonated polystyrenes, polyvinyl pyrrolidone/polystyrene copolymers, polysaccharides such as dextran and mucopolysaccharides, xanthan, hydrophilic cellulose derivatives such as hydroxypropyl cellulose and methyl cellulose, hyaluronic acid, hydrophilic polyacrylates and methacrylates such as polyacrylic acid, polymethacrylic acid, and polyhydroxyethyl methacrylate, DNA and RNA or analogs thereof, heparin, chitosan, polyethylene imine, polyacrylamide, as well as other nitrogen-containing polymers (e.g., amine-containing polymers), and combinations thereof. In this context, "combination" means mixtures and copolymers thereof. The mixtures and copolymers can include one or more members of the group and/or other monomers/polymers.

For certain other embodiments that include a hydrophilic active agent with a molecular weight of no greater than about 1200 g/mol, the hydrophilic polymer is preferably a hydrophilic polyurethane. A preferred hydrophilic polyurethane includes soft segments having therein polyethylene oxide units. Examples of suitable hydrophilic polyurethanes are poly(ether urethanes) available from Thermedics, Inc. (Woburn, MA), under the tradename TECOPHILIC.

Preferred embodiments of the present invention that include a hydrophilic active agent with a molecular weight of no greater than about 1200 g/mol include a combination of a poly(ether urethane), which has a Tg of about 22°C, and a second poly(ether urethane), which has a Tg of 77°C, as a blend that forms a cap coat in a reservoir system. In this embodiment, both polyurethanes are hydrophobic, and both polyurethanes have a solubility parameter greater than $21 \text{ J}^{1/2}/\text{cm}^{3/2}$. Thus, they can be used with an active agent that has a similarly matched solubility parameter, even if the active agent is hydrophilic.

Please insert the following new paragraphs at page 32, line 23:

In one embodiment of polymer blends for the fourth group of active agents, a miscible polymer blend of the present invention includes at least one polymer that is hydrophilic and a

second polymer that has a different swellability in water than the swellability in water of the hydrophilic polymer (the first polymer). The second polymer may be hydrophobic, hydrophilic, or amphiphilic.

Preferably, the second polymer is hydrophilic or hydrophobic, and more preferably, the second polymer is hydrophilic, in the miscible polymer blends useful for the fourth group of active agents. This second polymer may also be a homopolymer or a copolymer. If the polymer is amphiphilic, it is a copolymer or a partially hydrophilically (or hydrophobically) modified homopolymer.

Preferably in the miscible polymer blends useful for the fourth group of active agents, the second polymer is a hydrophilic polymer having a swellability in water at 37°C lower than the swellability in water of the first hydrophilic polymer (e.g., the hydrophilic polyurethane). Thus, the second polymer is preferably selected to decrease the swelling volume ratio of the blend, thereby tuning the diffusivity of the system. The swelling volume ratio is the volume of the polymer swollen with water divided by the volume of the dry polymer.

For example, a preferred combination includes a polyvinyl pyrrolidone-co-vinyl acetate copolymer, which has a swellability of greater than 100% (i.e., it is water soluble), and poly(ether urethane), which has a swellability of 60%.

Swellabilities of polymers in water can be easily determined. It should be understood, however, that the swellability results from incorporation of water and not from an elevation in temperature. Typically, by selecting relatively low and high swell polymers that are miscible, the dissolution kinetics of the system can be tuned. This is advantageous because the range of miscible blends can be used to encompass very different dissolution rates for active agents of similar solubility.

Preferably, higher molecular weights of polymers are desirable for better mechanical properties; however, the molecular weights should not be so high such that the polymer is not soluble in a processing solvent for preferred solvent-coating techniques or not miscible with the

other polymer(s) in the blend. A preferred hydrophilic polymer in the miscible polymer blends useful for the fourth group of active agents has a number average molecular weight of at least about 20,000 grams/mole (g/mol), and more preferably at least about 50,000 g/mol. A preferred hydrophilic polymer has a number average molecular weight of no greater than about 10,000,000 g/mol, and more preferably no greater than about 1,000,000 g/mol. A preferred second polymer, whether it is hydrophilic or hydrophobic, has a number average molecular weight of at least about 10,000 g/mol, and more preferably at least about 80,000 g/mol. A preferred second polymer, whether it is hydrophilic or hydrophobic, has a number average molecular weight of no greater than about 10,000,000 g/mol, and more preferably no greater than about 1,000,000 g/mol, and even more preferably no greater than about 300,000 g/mol. Any one polymer is preferably present in the miscible polymer blend in an amount of at least about 0.1 wt-%, and more preferably up to about 99.9 wt-%, based on the total weight of the blend, depending on the active agent and specific choice of polymers.

Suitable hydrophilic polymers (for use in the miscible polymer blends useful for the fourth group of active agents) can be naturally occurring or synthetic. They can include, polypeptides (e.g., proteins, oligopeptides) and polynucleotides (e.g., oligonucleotides, DNA, RNA, and analogs thereof). Examples of suitable hydrophilic polymers include, but are not limited to, polyurethanes, polyvinyl alcohols, poly(alkylene ether)s such as polypropylene oxide, polyethylene oxide, and polytetramethyl oxide, polyvinyl pyridines, polyvinyl pyrrolidones, polyacrylonitriles (at least partially hydrolyzed), polyacrylamides, polyvinyl pyrrolidone/polyvinyl acetate copolymers, sulfonated polystyrenes, polyvinyl pyrrolidone/polystyrene copolymers, polysaccharides such as dextran and mucopolysaccharides, xanthan, hydrophilic cellulose derivatives such as hydroxypropyl cellulose and methyl cellulose, hyaluronic acid, hydrophilic polyacrylates and methacrylates such as polyacrylic acid, polymethacrylic acid, and polyhydroxyethyl methacrylate, DNA and RNA or analogs thereof, heparin, chitosan, polyethylene imine, polyacrylamide, as well as other nitrogen-containing polymers (e.g., amine-containing polymers), and combinations thereof. In this context,

"combination" means mixtures and copolymers thereof. The mixtures and copolymers can include one or more members of the group and/or other monomers/polymers.

For certain embodiments of miscible polymer blends useful for the fourth group of active agents, the hydrophilic polymer is preferably selected from the group consisting of polyvinyl pyrrolidone, polyvinyl alcohol, polypropylene oxide, polyethylene oxide, polystyrene sulfonate, heparin, chitosan, polyethylene imine, polyacrylamide, and combinations thereof. Examples of copolymers include polyvinyl pyrrolidone-co-vinyl acetate copolymer and polyvinyl pyrrolidone-styrene copolymer.

For certain other embodiments of miscible polymer blends useful for the fourth group of active agents, the hydrophilic polymer is preferably a hydrophilic polyurethane. A preferred hydrophilic polyurethane includes soft segments having therein polyethylene oxide units. Examples of suitable hydrophilic polyurethanes are poly(ether urethanes) available from Thermedics, Inc. (Woburn, MA), under the tradename TECOPHILIC.

Examples of suitable hydrophobic polymers include polyurethanes, polycarbonates, polysulfones, polyphenylene oxides, polyimides, polyamides, polyesters, polyethers, polyketones, polyepoxides, styrene-acrylonitrile copolymers, polyvinyl alkylates, polyvinyl alkyl ethers, polyvinyl acetals, hydrophobic cellulose derivatives such as methyl cellulose, ethyl cellulose, hydroxy propyl cellulose, cellulose acetate, cellulose propionate, cellulose butyrate, cellulose nitrate, hydroxypropyl methyl cellulose, hydroxypropyl ethyl cellulose, methyl ethyl cellulose, cellulose acetate propionate, cellulose acetate butyrate, cellulose propionate butyrate, cellulose acetate propionate butyrate, and combinations thereof. In this context, "combinations" refers to mixtures and copolymers thereof. The copolymers can include one or more members of the group and/or other monomers/polymers.

For certain embodiments of miscible polymer blends useful for the fourth group of active agents, a preferred hydrophobic polymer is a polyurethane. Suitable hydrophobic polyurethanes are available from a variety of sources such as Thermedics, Inc., Woburn, MA, including

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polymers marketed under the tradenames TECOPLAST, TECOTHANE, CARBOTHANE, and TECOFLEX. Other preferred polymers include the PELLETHANE and ISOPLAST series available from Dow Chemical Co. (Midland, MI), especially PELLETHANE 75D; ELASTHANE, PURSIL, CARBOSIL, BIONATE, and BIOSPAN, available from the Polymer Technology Group, Inc. (Berkeley, CA); ESTANE, available from Noveon, Inc. (Cleveland, OH); ELAST-EON, available from AorTech Biomaterials (Sidney, Australia); and TEXIN, available from Bayer (Pittsburg, PA).

Examples of such polyurethanes include poly(carbonate urethane), poly(ether urethane), poly(ester urethane), poly(siloxane urethane), poly(hydrocarbon urethane), such as those exemplified in U.S. Pat. No. 4,873,308, sulfur-containing polyurethanes, such as those exemplified in U.S. Pat. Nos. 6,149,678, 6,111,052, 5,986,034, end-group modified polyurethanes, such as those commercially available from Polymer Technology Group, Inc., under the trade designation SME, or combinations thereof. Additionally, the polyurethanes may be derived from isocyanates including aromatic and/or aliphatic groups. A particularly preferred polyurethane is a poly(carbonate urethane) or a poly(ether urethane).

Please replace the paragraph beginning at page 31, line 7, with the following amended paragraph.

Examples of suitable combinations of polymer blends for the [[first]] second group of active agents are described in greater detail in Applicants' Assignee's copending application entitled ACTIVE AGENT DELIVERY SYSTEM INCLUDING A POLYURETHANE, MEDICAL DEVICE, AND METHOD, having U.S. Patent Application Serial No. 10/640,823, filed on even date herewith.

Please replace the paragraph beginning at page 31, line 19, with the following amended paragraph.

Examples of suitable polymers for systems that deliver an active agent from this third group include at least one hydrophobic polymer including hydrophobic cellulose derivatives such as methyl cellulose, ethyl cellulose, hydroxy propyl cellulose, cellulose acetate, cellulose propionate, cellulose butyrate, cellulose nitrate, hydroxypropyl methyl cellulose, hydroxypropyl ethyl cellulose, methyl ethyl cellulose, cellulose acetate propionate, cellulose acetate butyrate, cellulose propionate butyrate, cellulose acetate propionate butyrate, and combinations thereof. The polymer blends for these systems can include a second polymer that is either hydrophobic or hydrophilic, examples of which are listed in Table 1. For example, the hydrophilic polymer can be a hydrophilic polyurethane. A preferred hydrophilic polyurethane includes soft segments having therein polyethylene oxide units. Examples of suitable hydrophilic polyurethanes are poly(ether urethanes) available from Thermedics, Inc. (Woburn, MA), under the tradename TECOPHILIC. Preferably, the miscible polymer blend suitable for use with the third group of active agents does not include the following: a blend of a hydrophobic cellulose derivative and a polyurethane or polyvinyl pyrrolidone; and/or a blend of a polyalkyl methacrylate and a polyethylene-co-vinyl acetate.